

U.S. Application No. 09/744,634
SECOND PRELIMINARY AMENDMENT

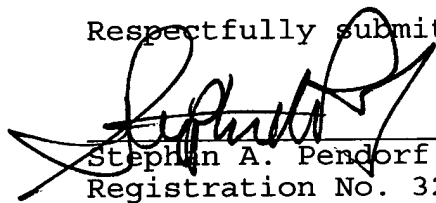
Attorney Docket: 3926.018

Support for the amendment of claim 5 can be found at page 6, line 20-22 ``spectrally pure light with $\lambda = 450$ nm enters into the image recording system (= color modulators FM1, FM2), as shown in Fig. 2."

Claims 1 and 11 concern a common inventive concept - the projection (claim 1) or recording (claim 11) involve dividing the light into two complementary partial light bundles, the second partial light bundle being complementary to the first, and subsequent projection or recording.

Entry and favorable consideration prior to consideration are respectfully requested.

Respectfully submitted,



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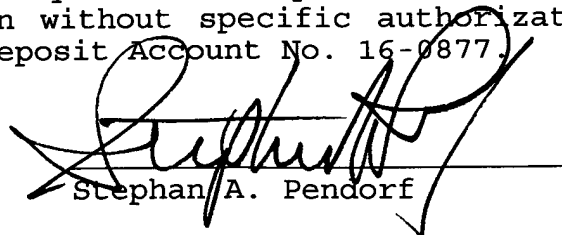
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Date: December 11, 2001

CERTIFICATE OF MAILING AND AUTHORIZATION TO CHARGE

I hereby certify that the foregoing SECOND PRELIMINARY AMENDMENT for U.S. Application No. 09/744,634 filed January 26, 2000, was deposited in first class U.S. mail, postage prepaid, addressed: Attn: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on December 11, 2001.

The Commissioner is hereby authorized to charge any additional fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account No. 16-0877.



Stephan A. Pendorf

VERSION WITH MARKINGS TO SHOW CHANGES MADE HEREBY ATTACHED

The Examiner is requested to accept the marked-up version as it is based on the previous version, which when modified as below, produces the clean version submitted with the current amendment.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A device for projecting a color image upon a screen (S) including
a projection lamp (PL) for emission of a radiation spectrum,
a beam splitter (ST2) for separation of the radiation spectrum emitted from the projection lamp into a first partial light bundle (B1, G1, R1) and a second partial light bundle (B2, G2, R2) complimentary to the first part light bundle (B1, G1, R1),
two color image modulators (FM1, FM2) for [recording and] reproducing images in the respective [the] partial light bundles (B1, G1, R1, B2, G2, R2),
a beam integrator (SV) is provided subsequent to the color image modulators (FM1, FM2) for reuniting the first partial light bundle (B1, G1, R1) with the second partial light bundle (B2, G2, R2), and a lens system (Ob) for output of the therefrom resulting color image.
2. (Amended) A device according to Claim 1, wherein the beam splitter (ST2) includes a splitter dichroic mirror (D1) with triple band pass characteristic (B1, G1, R1).

3. (Amended) A device according to Claim 2 [1], wherein the beam integrator (SV) includes an integrator dichroic mirror (D2) with the other triple band characteristic (B2, G2, R2).
4. (Amended) A device according to Claim 11, wherein the two color modulators (FM1, FM2) form a stereo camera.
5. (Amended) A device according to Claim 1, wherein the first partial light bundle is comprised of three first narrow transmission ranges (B1, G1, R1) and the second partial light bundle is comprised of three second narrow transmission ranges (B2, G2, R2) complimentary to the first transmission ranges, wherein the transmission ranges (B1, G1, R1, B2, G2, R2) lie within the wavelength ranges of the blue, green and red receptors.
6. (Amended) A device according to Claim 1, wherein the beam splitter (ST2) includes at least one splitter mirror.
7. (Amended) A device according to Claim 1, wherein the beam integrator (SV) includes at least one integrator mirror.
8. (Amended) A device according to Claim 1, further including a pair of glasses (B) with interference filters (IF1, IF2) which provide different transmission characteristics for the left eye and the right eye, which produce for the left eye a half image with the first transmission range (B1, G1, R1) and for the right eye a further half image with the second transmission range (B2, G2, R2) for stereoscopic vision.

9. A device for recording a color image of an object, the device comprised of

a first camera (K1);

a second camera (K2);

a beam splitter (ST1) placed between said object and said cameras (K1, K2), said beam splitter comprising mirrors (S1, S2, S3) and a dichroic mirror (D1) with a transmission and reflection characteristic such that light from said object being recorded impinging upon (D1) is spectrally separated into two partial light bundles, wherein the first partial light bundle is comprised of three first narrow transmission ranges (B1, G1, R1) and the second partial light bundle is comprised of three second narrow transmission ranges (B2, G2, R2) complimentary to the first transmission ranges, wherein the transmission ranges (B1, G1, R1, B2, G2, R2) lie within the wavelength ranges of the blue, green and red receptors.

10. A device as in claim 9, wherein the beam splitter spectrally separates the light from the object being recorded into two partial light bundles, wherein

one bundle has a component within the wavelength range 435 - 455 nm and the other has a component within the wavelength range 460 - 480 nm,

one bundle has a component within the wavelength range 510 - 530 nm and the other has a component within the wavelength range 535 - 555 nm, and

one bundle has a component within the wavelength range 600 - 620 nm and the other has a component within the wavelength range 625 - 645 nm.

Please add the following claim:

--11. A device for recording a color image, including
a guide for the incident light,
a beam splitter (ST1, ST2) for separation of the radiation
spectrum of the incident light into a first partial light bundle
(B1, G1, R1) and a second partial light bundle (B2, G2, R2)
complimentary to the first part light bundle (B1, G1, R1), and
two color image modulators (FM1, FM2).

12. A device according to Claim 11, wherein the beam splitter
(ST2) includes a splitter dichroic mirror (D1) with triple band
pass characteristic (B1, G1, R1).--